

DISCUSSION OF THE AMENDMENT

Claims 1-4, 6-11 and 15-28 are active in the present application. Claims 5 and 12-14 are canceled claims. Claims 21-28 are new claims. Support for new Claim 21 is found on page 8. Support for new Claims 22-26 is found on pages 5 and 19 of the specification. Support for new Claims 27 and 28 is found in the original claims. Independent Claim 1 is amended herein to include the limitation of previous dependent Claim 5 and to recite a polycarbonate resin foamed layer that has certain foam magnification characteristics. Support for the amendment is found on page 19 of the specification.

No new matter is believed to have been added by this amendment.

REMARKS

The Office asserted in the Office Action of May 10, 2007 that the invention of the previously pending claims is anticipated by a publication to Hay (U.S. 2004/0043234).

Applicants submit that presently pending Claim 1 is not anticipated by Hay.

Hay discloses a light management film that has particular refractive index and reflection properties (see the Abstract and paragraphs [0011], [0012], and [0033] of Hay).

The reflection of Hay is total internal reflection (TIR) (see paragraph [0011] of Hay). TIR is a function of the refractive index of a material. TIR occurs when light is at least partially first transmitted through the material (see paragraph [0012] of Hay). TIR is different from the surface reflection of the light-reflecting polycarbonate resin sheet of the present application (see new dependent Claims 22-24 which define minimum surface light resistance of the claimed light-reflecting polycarbonate resin). The light-reflecting polycarbonate resin sheet of the claimed invention has high surface reflectance and low transmission. In contrast, Hay discloses an article that has high total internal reflectance. Applicants submit that it is readily recognized by those of ordinary skill in the art that a material having high total internal reflectance must necessarily transmit light or else the properties of refraction and internal reflectance cannot take place.

The claimed light-reflecting polycarbonate resin sheet is different from the light management film of Hay because the film of Hay necessarily requires transmission in order to obtain retro-reflection (see paragraph [0033]). The structure of the presently claimed invention must be different from the structure of Hay because Hay requires high total internal reflection (e.g., a feature necessarily also requires some transmission of light) whereas the presently claimed light-reflecting polycarbonate resin sheet has high surface reflection and low transmission.

The Office appears to assert that Hay discloses the light-reflecting polycarbonate resin disclosed in the present specification because Hay discloses an embodiment having an outer layer that is made from a polymer foam. Applicants submit that this is not correct. The presently claimed light-reflecting polycarbonate resin sheet includes a polycarbonate foam resin layer. The foam polycarbonate resin layer provides high surface reflection. In contrast, the polymer-containing layer of Hay provides high total internal reflectance which is different from the surface reflection of the claimed invention. Thus, regardless whether Hay discloses light management films that may be made from polycarbonate-containing compositions, such films are different from the claimed sheet because the structure of the Hay film and the structure of the claimed light-reflecting polycarbonate resin sheet are different.

For example, Hay achieves high total internal reflectance by embossing the surface of the Hay film with a pattern, see for example paragraphs [0008], [0036], [0039], and [0041]. No such embossing is required in the claimed invention because embossing is not necessary to achieve high surface reflection and low transmission.

Because the structure of the light management film of Hay is different from the structure of the light-reflecting polycarbonate resin sheet as evidenced by at least the difference in reflecting properties, the presently claimed invention must be different from the light management film of Hay. Therefore Hay cannot anticipate the presently claimed invention. Applicants request withdrawal of the rejection of the present claims as anticipated over Hay.

In order to reject some of the dependent claims of the present application the Office combined Hay with Funaki (U.S. 2006/0159926). Applicants submit that those of ordinary skill in the art would not be motivated to combine Funaki and Hay at least because the structure and composition of the polymeric materials of Funaki are not compatible with the physical characteristics required of the polymers of Hay. As already mentioned above, the

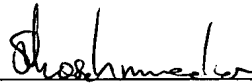
polymers of Hay must have light transmitting properties or else it would not be possible to obtain high total internal reflection. The polymeric materials of Funaki are filled with materials such as titanium oxide (see the Abstract of Funaki). Applicants submit that it is readily evident that a filled plastic that contains titanium oxide will have substantially degraded light transmitting properties in comparison to the virgin resin (e.g., the resin in the absence of the titanium oxide). It would make no sense to use the polymer compositions of Funaki in the light management film of Hay because to do so would result in a composition that is unable to provide high total internal reflection. Such a result is directly contradictory to the advantages and characteristics of the light management film of Hay.

For at least the reason above, it would make no sense for those of ordinary skill in the art to combine Hay and Funaki to arrive at the presently claimed invention. Therefore, the rejection of any of the presently pending claims over the combination of Hay and Funaki is not supportable and should be withdrawn.

For the reasons discussed above, Applicants submit that all now-pending claims are patentable over the prior art relied on by the Office and respectfully request the mailing of a Notice of Allowance acknowledging the patentability of the presently claimed subject matter.

Respectfully submitted,

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